

**Notice of Allowability**

Application No.

10/634,334

Examiner

Marc S. Zimmer

Applicant(s)

HALLIDAY ET AL.

Art Unit

1796

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/09/07.
2. ☒ The allowed claim(s) is/are 20-29, 32-38 and 40-42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

***Terminal Disclaimer***

The terminal disclaimer filed on October 9, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of a patent evolving from U.S. Application Serial No. 11/437351 has been reviewed and is accepted. The terminal disclaimer has been recorded.

***Allowable Subject Matter***

With their amendments, Applicants have successfully obviated the claim objection and rejection stated under 35 U.S.C. 112, first paragraph.

The Examiner had also previously held that claims 20-24, 26-28, 31, 33-36, and 40-42 were unpatentable over Griffith et al. The Examiner has reconsidered this rejection in light of Applicant's remarks and has made the determination that it too should be withdrawn.

In the last correspondence, the Examiner had remarked that Applicant's claims "merely stipulate[d] that a polymer latex of specific identity and water are brought into contact with the walls of a borehole. Though not expressly stated, the Examiner was equating the terms "circulating" and "contacting". It is now believed that these words should not be treated as being of identical scope. Indeed, the act of circulating a fluid is a dynamic process whereby the fluid is sent into movement, typically in a circular fashion by a shearing force, and the surfaces being treated are in continuous contact with a moving fluid. "Contacting", as it pertains to drilling fluids on a borehole wall, is a broader term that embraces dynamic and static treatment alike. Applicant distinguishes

between contacting dynamically with a moving fluid (circulating) and a static process whereby a drilling fluid is introduced into a borehole and allowed to contact the walls of the borehole, but where no movement of the fluid is promoted, in their Specification.

Applicant points out, correctly, that Griffith does not mention circulating the fluid. See paragraph 63. Instead, the drilling fluid is introduced into a borehole whereupon the various elements of the dispersion precipitate induced by their destabilization by the contents of a subterranean formation into a large mass that is squeezed into highly permeable fractures using pressure. There is no indication that, once introduced into the borehole that any sort of shearing of the fluid should commence and, in fact, the skilled artisan might even expect that, were the drilling fluid taught by Griffith to be circulated, the larger insoluble masses sought might not be realized. Instead, smaller masses may be formed that are ineffectual as a plug for larger cracks. Of course, this is strictly conjecture. The more salient point is that the reference does not teach circulating their fluid as Applicant has suggested.

As for the limitation concerning the particle size of the claimed latex, the prior art mentions a "LATEX 2000™" as an embodiment of styrene/butadiene latex but the Examiner could not find any information concerning the particle size of this commercial product. Ultimately, this matter is of little consequence as the claims already recite at least one step that is unobvious over the prior art.

An updated survey of the prior art did not yield a reference more germane than those already of record. Accordingly, claims 20-29, 31-38, and 40-42 are deemed allowable.

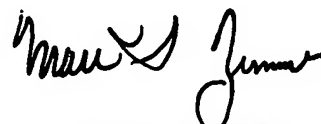
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 5, 2007

  
MARC S. ZIMMER  
PRIMARY EXAMINER